PHS39

DIRECT MEDICAL COST OF COMPLICATIONS IN PATIENTS WITH NON VALVULAR ATRIAL FIBRILLATION AT THE SOCIAL SECURITY IN PERU

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OBJECTIVES: Estimate direct medical costs of selected acute complications in patients with non-valvular atrial fibrillation (NVAF) at the Social Security (EsSalud) in Peru. **METHODS:** The electronic database of EsSalud´s reference hospital: Hospital Nacional Guillermo Almenara Irigoyen (HNGAI) was used to identify the study population. International Classification of Diseases (ICD) 10 codes were used to identify patients with NVAF and select complications of AF. Complications of interest are: ischemic stroke, hemorrhagic stroke, systemic embolism and myocardial infarction. Stroke events were classified by severity as mild, moderate, severe or fatal. All cases from 2011 -2012 meeting the inclusion criteria were reviewed. Patient level data from clinical charts was extracted to estimate resource utilization per patient per event. Costs were estimated using EsSalud´s 2013 tariffs manual and expressed per patient in 2013 USD. **RESULTS:** Ischemic stroke costs were estimated at $1,259, $1,818, $ 4,910, and $2,829.19 for mild, moderate, severe and fatal events, respectively. Hemmorhagic stroke were estimated at $1,707, $2,419, $11,991 and $2,111 for mild, moderate, severe and fatal event, respectively. Systemic embolism and myocardial infarction were estimated to cost $1,707 and $1,703 respectively. **CONCLUSIONS:** For AF patients within EsSalud, hemorrhagic stroke costs are higher than those estimated for ischemic stroke. As expected, costs increase as the severity of the event increase. These cost estimates can be used as patient-level costs inputs for economic model analysis of AF and its complications, from the perspective of EsSalud in Peru.

PHS40

HEALTH CARE PATHWAY AND COST OF OSTEOPOROSIS IN AN ITALIAN POPULATION

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OBJECTIVES: To describe Health Care Pathway and cost evaluation of patients with osteoporosis. **METHODS:** From ARNO Observatory, an Italian population database which provides comprehensive data referred to patient as: drug prescription, hospital discharges, imaging, lab tests and diagnostic examination, we analyzed a cohort of 185.489 subjects with osteoporosis in year 2011. A group without osteoporosis, matched by age, gender and LHU was compared to estimate differences in health costs and burden of disease. **RESULTS:** On a population of 5,313,167 over 40 years, we identified 185,489 patients treated with osteoporosis drugs (prevalence 3.5%). Prevalence rate is higher in female than male (6.1% vs 0.1%), modal value on 70-79 years. The average yearly cost/patient is 2.329€, 53% more than pair-matched group. This cost is due for 38.4% to drugs (31% specific drugs, 69% others), 42.8% to hospitalization and 18.8% to lab tests and diagnostic examinations. Most common specific drugs are bisphosphonates (81%), strontium ranelatum (21%), parathyroid hormone (1.2%) and SERMs (0.9%). A considerable percentage (24.8%) did not received vitamin D supplements in association. Compared to control group, patients with osteoporosis received more drugs expression of higher comorbidity (corticosteroids +70%, nervous system drugs +42%, PPI +33%) and were more frequently hospitalized, beyond fractures, for arthritis (+99%, p<0.01) and chronic bronchitis (+52%, p<0.01). Less than 50% of patients controlled their serum calcium levels in the last three years, 32% performed a densitometry and less than a fifth a radiography. **CONCLUSIONS:** A big data infrastructure is a valid instrument to evaluate patient care pathways, monitor the good practice of treatment and estimate cost of illness. In a large community setting of osteoporotic patients, the lack of supplement of vitamin D undermines the effectiveness of the specific pharmacological treatment. Despite low diagnostic approach, patients cost as much to the National Health System especially due to their frequent co-morbidities.

PHS41

ECONOMIC IMPACT OF RHEUMATIC DISEASES IN MEXICO

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OBJECTIVES: Juvenile Idiopathic Arthritis (JIA), Ankylosing Spondylitis (AS), and Psoriatic Arthritis (PA) are rheumatic diseases which destroy articulations and limit their functions. The evolution of these conditions cause important physical impairment, which leads to disability, work loss, self-sufficiency, and QoL deterioration, among others. The objective is to estimate the economic impact of three rheumatic diseases: Juvenile Idiopathic Arthritis, Ankylosing Spondylitis, and Psoriatic Arthritis during 2011 using registries of the main Social Security Institution in the country called Instituto Mexicano del Seguro Social (IMSS). **METHODS:** It was review all registries related to the indications mentioned at different settings of care: ambulatory visits to GP and specialist, emergency room (ER), and hospital discharge (HD) of IMSS from January 1st to December 31st, 2011. Based on this information it was calculated the cost of care using unitary cost published by the Institution according to the type of service and the hospital DRG implicated. **RESULTS:** In 2011 the IMSS provided 45,528 consultations for AS, 51% were for patients between 30-49 years-old. 28,716 (63%) were for GP; 16,257 (36%) specialist; 555 (1%) ER, and 91 HD. For JIA, there were 6,285 consultations; 1,766 (28%) were for GP; 4326 (69%) for specialist; 193 (3%) ER, and 103 HD. For PA there were 1,587 consultations; 619 (39%) for GP; 873 (55%) specialist; 95 (6%) ER, and 195 HD. The costs of the three diseases at IMSS during 2011 were: AS = US $2.94 million, JIA =US $0.68 million and PA= US $0.37 million. The total cost of the three was US $4 millions (ER 1US=13MXN). **CONCLUSIONS:** These diseases affect quality of life and ability to work, considerably. Therefore, the cost of the three diseases might be underestimated due to productivity loss which is not included in the cost.

PHS42

INCREMENTAL HEALTH CARE RESOURCE UTILIZATION ASSOCIATED WITH AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE BY END-STAGE RENAL DISEASE STATUS

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OBJECTIVES: Incremental health care resource utilization associated with autosomal dominant polycystic kidney disease (ADPKD) was estimated across two subgroups; individuals with ADPKD and end-stage renal disease (ESRD) and those with ADPKD but without ESRD. **METHODS:** Study data were from a large administrative claims and enrollment database. Individuals 18 y/o or older, enrolled in tracked health plans for 12 months from April 1, 2011 through March 31, 2012, and with an ICD-9-CM diagnosis code for “polycystic kidney, autosomal dominant” (753.13) or for “polycystic kidney, unspecified type (753.12) were identified as having ADPKD, and linked one-to-one with individuals without ADPKD on age and gender. ESRD was identified by presence of ICD-9-CM code 585.6. Zero-inflated negative binomial models estimated incremental hospitalizations, hospital days, outpatient visits, and emergency room visits for each sub-group, adjusting for age, gender, Charlson co-morbidity index, cardiovascular disease, diabetes and geographical region. **RESULTS:** A total of 3,844 individuals with ADPKD who satisfied selection criteria were linked one-to-one with 3,844 individuals without ADPKD. Among persons with ADPKD, 644 had a diagnosis of ESRD. The sample was 53% female and 55% were between 45 to 64 years old. Incremental mean (standard error) resource utilization associated with ADPKD with ESRD as compared to persons without ADPKD was 0.35 (0.052) or 35 additional hospitalizations per 100 patients, 2.5 (0.42) or 250 hospital days per 100 patients, and 24.0 (1.2) or 2,400 outpatient visits per 100 patients. Incremental mean (standard error) resource utilization associated with ADPKD but without ESRD as compared to persons without ADPKD was 0.065 (0.028) or 6.5 additional hospitalizations per 100 patients, 0.5 (0.091) or 50 hospital days per 100 patients, and 4.4 (0.41) or 440 outpatient visits per 100 patients. **CONCLUSIONS:** ADPKD was associated with incrementally greater health care resource utilization even before patients reached ESRD.

PHS43

TREATMENT PATTERNS AND COST OF CARE FOR PATIENTS WITH PANCREATIC CANCER

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OBJECTIVES: This study evaluated treatment patterns and costs among patients with pancreatic cancer (PC). **METHODS:** A retrospective study analyzed data spanning January 2008-June 2012 from 3 large integrated claims databases. Adult patients with a diagnosis of PC (ICD-9 157.xx) were included if they had a minimum eligibility of 12 months prior and 3 months following their first PC diagnosis and had no diagnosis of cancer in the pre-period. Patients were categorized as having exocrine PC (ICD-9 157.0-157.3; 157.8-157.9), endocrine PC (ICD-9 157.4), or metastatic-exocrine PC (ICD-9 157.0-157.3; 157.8-157.9, 196.xx-199.xx). Treatment patterns, health care resource use, and all-cause costs (2012 USD) were evaluated after cancer diagnosis. **RESULTS:** There were 2901, 6119, and 464 patients in each of the 3 databases meeting all inclusion criteria, respectively. The majority of patients had exocrine PC (97%-98%), with 40%-76% having metastatic disease. Patients were on average 60.3-64.5 (±11.3-14.0) years of age and 43%-52% were female. No treatment was received by 35%-55% of patients, 36%-55% of patients received chemotherapy ± radiation and/or surgery, and 9%-10% received radiation and/or surgery without chemotherapy. Second and third-line chemotherapy was received by 17%-32% and 9%-17% of patients, respectively. Among those with exocrine PC, patients with metastatic disease experienced an average of 0.25-0.31 inpatient, 2.3-2.9 office, 3.0-4.0 other outpatient visits and received 4.2-5.1 prescriptions per month vs 0.09-0.11 inpatient visits, 1.3-1.7 office visits, 1.3-1.9 other outpatient visits and 3.2-4.1 prescriptions per month in those without metastatic disease. Total monthly costs averaged $9,478-$12,042 and $1,022-$3,084 in patients with and without metastatic disease, respectively. The majority of costs were attributable to medical services ($7,977-$11,212 and $697-$2,852, respectively), with pharmacy costs contributing to a small proportion of the total costs ($830-$1,501 and $232-$326, respectively). **CONCLUSIONS:** Health care resource utilization and costs are highest among those with metastatic PC, totaling as much as $12,042 per month.

PHS44

COST OF PATIENT CARE AT DIFFERENT STAGES OF TREATMENT WITHIN THE PUBLIC HEALTH MODEL OF HIV CARE; ANALYSIS FROM AN URBAN HIV CENTRE IN UGANDA

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OBJECTIVES: In 2013 a change in WHO guidelines increased the number of people recommended to start antiretroviral treatment (ARVs) from 16 to 28 million worldwide; at present around 10 million are enrolled in care. Additionally the number of people requiring second line antiretrovirals (ARVs) is increasing. Much of this burden is in Sub Saharan Africa (SSA). The Infectious Diseases Institute (IDI) in Kampala, Uganda runs a clinic of 8000 patients; some of these have been on ARVs for >10 years. The objective of this study was to analyze actual costs of different patient subgroups per year at IDI. **METHODS:** We use a fully digitalized electronic patient management system (ICEA), which records individual patient data including all visit information. We linked ICEA to Navision accountancy software, in order to determine the actual cost of patient care from October 2012-October 2013. The analysis was conducted from a provider perspective. We calculated the average cost